

Indicator name	<b>Index of performance of water utilities</b>
Prepared by	UN-HABITAT
Example	Indicator under development and not yet tested
Rationale	<p>Increasing urban population will require local authorities and utilities (public and/or private) to provide adequate basic services to meet the growing demand. With the aid of benchmarking and indicators, the performance of local authorities and utilities can be monitored both at the local, national and international levels. This indicator can assist:</p> <p>(i) utilities to monitor performance and plan for the increasing demand from future urban growth</p> <p>(ii) governments to monitor and adjust sector policies and programmes to keep pace with urbanization</p> <p>(iii) regulators to ensure equitable and reliable urban services,</p> <p>(iv) community groups to be better informed, and</p> <p>(v) private sector to identify reliable markets and opportunities for investment.</p>
Position in DPSIR chain	State
Definition of indicator	The performance of water service providers in urban areas assessed in terms of: affordability, quality of water supplied, accessibility to service, quantity of water supplied and reliability. Provision of water and sanitation in cities can be undertaken by public or private utilities. The level of performance of these utilities will dictate how well the cities are being served according to the aforementioned criteria.
Underlying definitions and concepts	<p>Affordability defined as the supply cost per litre, or what consumers (domestic, commercial and industries) are paying for a litre of water plus the cost of connection;</p> <p>Quality defined at the source of water, quality at the tap, health related Complaints;</p> <p>Accessibility defined as the number of connections to water supply and sewerage;</p> <p>Quantity defined as domestic consumption per capita per day and industrial and commercial consumption per day;</p> <p>Performance as a function of unaccounted for water and hours of supply.</p>
Specification of data & determinants needed	Total urban population and operation and maintenance data from utilities.
Computation	<p>This indicator is a performance index that attempts to incorporate the following information:</p> <ul style="list-style-type: none"> <li>• Affordability = proportion of water supplied for domestic, commercial and industrial use and associated tariffs and connection costs</li> <li>• Quality = water quality analysis (e.g. BOD, heavy metals, coli form count, etc.)</li> <li>• Accessibility (%) = population connected/total population</li> <li>• Quantity (%) = Domestic, industrial and commercial consumption per day / total consumption</li> <li>• Performance, where Unaccounted for water = volume of water consumed (bills)/ total volume of water plus the proportion of hours per day that water is supplied</li> </ul>
Unit of expression	Not yet defined.
Data sources, availability and quality	Water utility annual reports, national health surveys, national tariffs
Scale of application	Local community, city or other municipal unit.
Geographical coverage	National and local
Interpretation	The index provides a group of indicators linking the operation of water utility to access to adequate services to urban residents.

Linkage with other indicators	Water and governance Water and Industry
Alternative methods and definitions	Each variable can be monitored separately and compared to a benchmark. For example in the case of: <ul style="list-style-type: none"> <li>• Affordability as the cost of water in low-income as compared to high-income settlements.</li> <li>• Water quality based on water analysis at household level as compared to WHO standards for safe drinking water.</li> </ul>
Related indicator sets	Access to water and sanitation by poor communities ( high connection costs and tariffs
Sources of further information	Water Utilities Asian Development Bank World Bank
Other institutions involved	None noted.